## REMARKS

Claims 11 to 19 are now pending and being considered. It is respectfully submitted that all of the presently pending claims are allowable, and reconsideration of the present application is respectfully requested.

Applicant notes with appreciation the acknowledgement of the claims for foreign priority.

Applicant thanks the Examiner for considering the previously filed Information Disclosure Statement, PTO-1449 paper, and cited references.

Figures 1, 2a, and 6 were objected to for failing to provide legends designating them as prior art. Applicant has amended the drawings to obviate the present objection. Figure 7 has also been amended to delete text. Approval and entry are respectfully requested. In view of the foregoing, withdrawal of these objections to the drawings is respectfully requested.

Claims 12 to 16 were objected to as being dependent from canceled claims. As suggested by the Office Action, claims 12 to 16 have been amended herein without prejudice to obviate the present objection with respect to those claims. Withdrawal of this objection is therefore respectfully requested.

Claim 19 was objected to for including "process(es) (computer-implementing [sic] simulating and verifying a control system) and computer software (a generic animation and a host including at least one respective modeling tool and on target software of the control system) limitation in an apparatus claim." (Office Action, p. 2). Claim 19 has been amended herein without prejudice to obviate the present objection with respect to this claim. Support for this amendment may be found in the Substitute Specification, e.g. at page 9, lines 11 to 26. Withdrawal of this objection is therefore respectfully requested.

Claims 11 to 19 were rejected under 35 U.S.C. § 101 as directed to non-statutory subject matter. It is respectfully submitted that all of the presently pending claims, as presented, are directed to statutory subject matter for at least the following reasons.

As regards claims 11 to 19, the Office Action asserts that the claims are directed to a computer program per se. While Applicant does not agree with the merits of this rejection, to facilitate matters, claims 11, and 17 to 19 have been amended herein without prejudice to obviate the present rejection as to claims 11 (and its dependent claims 12 to 16), and 17 to 19. Support for these amendments may be found in the Substitute Specification, e.g. at page 23, line 7 to page 24, line 16.

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Withdrawal of this rejection is therefore respectfully requested.

Claims 11 to 13, and 17 to 19 were rejected under 35 U.S.C. § 102(a) as anticipated by that which the Examiner characterizes as Applicant's Admitted Prior Art ("AAPA") of the instant application. Without addressing the Examiner's characterization of the AAPA as admitted prior art, it is respectfully submitted that the AAPA does not anticipate claims 11 to 13, and 17 to 19, as presented, for at least the following reasons.

To reject a claim under 35 U.S.C. § 102, the Office must demonstrate that each and every claim feature is identically described or contained in a single prior art reference. (See Scripps Clinic & Research Foundation v. Genentech, Inc., 18 U.S.P.Q.2d 1001, 1010 (Fed. Cir. 1991)). As explained herein, it is respectfully submitted that the Office Action does not meet this standard, for example, as to all of the features of the claims. Still further, not only must each of the claim features be identically described, an anticipatory reference must also enable a person having ordinary skill in the art to practice the claimed invention, namely the claimed subject matter of the claims, as discussed herein. (See Akzo, N.V. v. U.S.I.T.C., 1 U.S.P.Q.2d 1241, 1245 (Fed. Cir. 1986)).

As further regards the anticipation rejections, to the extent that the Office Action may be relying on the inherency doctrine, it is respectfully submitted that to rely on inherency, the Examiner must provide a "basis in fact and/or technical reasoning to reasonably support the determination that the allegedly inherent characteristic necessarily flows from the teachings of the applied art." (See M.P.E.P. § 2112; emphasis in original; and see Ex parte Levy, 17 U.S.P.Q.2d 1461, 1464 (Bd. Pat. App. & Int'f. 1990)). Thus, the M.P.E.P. and the case law make clear that simply because a certain result or characteristic may occur in the prior art does not establish the inherency of that result or characteristic. Accordingly, it is respectfully submitted that any anticipation rejection premised on the inherency doctrine is not sustainable absent the foregoing conditions.

Claim 11, as presented, relates to a simulation system for computerimplemented simulation and verification of a control system under development, the control
system comprising a target hardware and application software running on the target
hardware, the simulation system comprising hardware implementing a generic model
animation interface passing data from the target hardware to a modeling tool for animating a
model of the control system and an in-model calibration interface passing data from the
modeling tool to the application software, the model animation interface and the in-model
calibration interface using measurement and calibration technologies in a host-target

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architecture, to communicate with a measurement and calibration interface on the target hardware forming a link between the application software on the target hardware and the host. Support for the amendments to claim 11 may be found in the Substitute Specification, e.g. at page 9, lines 11 to 26; and page 23, lines 7 to 24.

In contrast, the AAPA indicates that the "host are target are connected with each other via dedicated M & C communication interfaces," indicated by P1, P2, and P3 in Figure 6. (AAPA, p. 5, lines 30 to 31). The AAPA does not indicate a generic model animation interface 72 or an in-model calibration interface, which use measurement and calibration technologies in a host-target architecture, as provided for in the context of claim 11, as presented, and as shown in Figure 7 of the present application,. (Substitute Specification, p. 20, line 24 to p. 21, line 2; and p. 24, lines 24 to 34). In addition, the AAPA does not indicate a standard measurement and calibration interface 76 on the target hardware, forming a link between the application software on the target hardware and the host, as provided for in the context of claim 11, as presented, and as further shown in Figure 7 of the present application. (Substitute Specification, p. 23, lines 7 to 24; and p. 26, lines 4 to 24). Further, the AAPA refers to "dedicated experiment hardware for rapid prototyping" and hardware protocol specific data transmissions between a host and a target, where the host and target must each use protocol handlers dependent on the target hardware. (AAPA, p. 5, line 24; and p. 8, lines 4 to 11). The AAPA does not refer to an interface that interfaces between the host and target in a target hardware abstracted manner. Therefore, the AAPA does not identically disclose, or even suggest, each feature of claim 11, as presented, so that the AAPA does not anticipate claim 11 or its dependent claims 12 and 13.

Claims 17 to 19 include subject matter analogous to that of claim 11, so that the AAPA does not anticipate claims 17 to 19 for at least essentially the same reasons as claim 11. Support for the amendments to claim 17 may be found in the Substitute Specification, e.g. at page 10, lines 8 to 15. Support for the amendments to claims 18 and 19 may be found in the Substitute Specification, e.g. at page 9, lines 11 to 26.

Withdrawal of this anticipation rejection is therefore respectfully requested.

Claims 14 to 16 were rejected under 35 U.S.C. § 103(a) as unpatentable over the combination of the AAPA and the article "Design of Dynamically Reconfigurable Real-Time Software Using Port-Based Objects," IEEE Transactions on Software Engineering, Vol. 23, No. 12, December 1997 (the "Stewart" reference). It is respectfully submitted that the

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combination of the AAPA and the "Stewart" reference does not render unpatentable these claims for at least the following reasons.

Claims 14 to 16 ultimately depend from claim 11 and are therefore allowable over the combination of the AAPA and the "Stewart" reference since the "Stewart" reference does not cure, and is not asserted to cure, the critical deficiencies noted above with respect to the AAPA as applied to claim 11, as presented. Therefore, the combination of the AAPA and the "Stewart" reference does not disclose, or suggest, all of the features included in claim 11, as presented, so that the combination of the AAPA and the "Stewart" reference does not render unpatentable claims 14 to 16, which ultimately depend from claim 11, as presented.

> Withdrawal of this obviousness rejection is therefore respectfully requested. Accordingly, all of the presently pending claims 11 to 19 are allowable.

## Conclusion

In view of the foregoing, it is respectfully submitted that all of the presently pending claims 11 to 19 are allowable. It is therefore respectfully requested that the objections and rejections be withdrawn. Prompt reconsideration and allowance of the present application are therefore respectfully requested.

Respectfully submitted,

Bv: /

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